

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1. - 34. (Cancelled)

35. (Currently Amended) A method for the treatment of an aqueous system containing or in contact with a metal sulfide scale while concomitantly inhibiting the corrosion of surfaces in contact with said aqueous system, said method comprising:

~~the step of adding to said aqueous system a scale and corrosion inhibiting amount of a formulation as defined in Claim 24~~ an anti-corrosion and anti-metal sulfide scale formulation comprising a THP⁺ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone.

36. (Previously Presented) The method according to Claim 35 wherein the aqueous system is used in enhanced oil recovery.

37. (Previously Presented) The method as claimed in Claim 35 wherein the aqueous system is used in industrial water systems or paper manufacturing systems.

38. (Previously Presented) The method as claimed in Claim 35 wherein the THP⁺ salt is added to the aqueous system in an effective amount of up to 30% by weight.

39. - 42. (Cancelled)

43. (New) The method according to Claim 35, wherein the acetylenic bond is adjacent to the hydroxyl group, said alcohol having the general formula (I):



wherein:

R¹, R² and R³ being the same or different, each independently represent hydrogen, C₁ to C₈ alkyl or functionally-substituted alkyl.

44. (New) The method according to Claim 43, wherein R^1 , R^2 and R^3 each independently represent hydrogen or C_1 to C_8 alkyl.
45. (New) The method according to Claim 44, wherein the alcohol is propargyl alcohol.
46. (New) The method according to Claim 35 wherein the metal sulfide scale is iron sulfide, lead sulfide or zinc sulfide.
47. (New) The method according to Claim 35, wherein the THP^+ salt comprises an anion selected from the group consisting of sulphate, chloride, phosphate, bromide, fluoride, carbonate, citrate, lactate, tartrate, borate, silicate, formate and acetate.
48. (New) The method according to Claim 35, wherein the formulation further comprises a surfactant.
49. (New) The method according to Claim 48, wherein the surfactant is a cationic surfactant.
50. (New) The formulation as claimed in Claim 49, wherein the cationic surfactant is selected from the group consisting of quaternary ammonium compounds, N-alkylated heterocyclic compounds, quaternised amido-amines, and amino methane phosphonates.
51. (New) The formulation as claimed in Claim 48 wherein the surfactant is selected from the group consisting of anionic, amphoteric and non-ionic surfactants.
52. (New) The method according to Claim 35 is for treating corrosion of mild steel, copper or aluminum.
53. (New) The method according to Claim 35, wherein a ratio of the THP^+ salt to the acetylenic alcohol is between 1:1 and 750:1.

54. (New) The method according to Claim 53, wherein the ratio is between 15:1 and 300:1.

55. (New) The method according to Claim 54, wherein the ratio is about 40:1.

56. (New) A method for the treatment of an aqueous system containing or in contact with a metal sulfide scale while concomitantly inhibiting the corrosion of surfaces in contact with said aqueous system, said method comprising:

adding to said aqueous system a scale and corrosion inhibiting amount of an anti-corrosion and anti-metal sulfide scale formulation consisting essentially of the reaction product of a THP^+ salt and a primary, secondary or tertiary alcohol having an acetylenic bond in the carbon backbone with a ratio of said THP^+ salt and said acetylenic alcohol of between 1:1 and 750:1.

57. (New) A method for the treatment of an aqueous system containing or in contact with a metal sulfide scale while concomitantly inhibiting the corrosion of surfaces in contact with said aqueous system, said method comprising:

adding to said aqueous system a scale and corrosion inhibiting amount of an anti-corrosion and anti-metal sulfide scale formulation consisting essentially of the reaction product of a THP^+ salt and propargyl alcohol, wherein a ratio of said THP^+ salt and said propargyl alcohol is between 1:1 and 750:1.